UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,491	06/06/2001	Toyokazu Sugai	1163-0340P	5202

2292	7590	04/22/2005	EXAMINER

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

FISH, JAMIESON W

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _06 June 2001_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-20_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _06 June 2001_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☒ All   b) ☐ Some *   c) ☐ None of:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1.   The information disclosure statements (IDS) submitted on 6/6/01 and 11/25/03

have been considered by the examiner.

Specification

2.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Claim Objections

3.   Claims **18-20** are objected to because of the following informalities: the claims

employee an unusual sentence structure for describing "the amount of information in

each type of table" under two different conditions. This unusual structure makes the

meanings of the claims difficult to comprehend. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims **1-20** are rejected under 35 U.S.C. 102(e) as being anticipated by Kaneko

et al. (US 6,505,347).

6.   From the specification (Page 10 lines 25-26), "table" is an information unit of the program information. Kaneko's terms groups, tables, sub-tables, and sub-groups would all be "tables" under this definition.

7.   Regarding claim **1**, Kaneko teaches a data sending-out device, in which associated data associated with and multiplexed with main data is produced and sent out, comprising producing means for producing the associated data of a prescribed type (See Fig. 4 Version Generator 2̶2̶ ^{25} and Col. 12 lines 33-52); and sending-out means for transforming the associated data of the prescribed type produced by the producing means into a bit stream and sending out the associated data transformed into the bit stream at a sending-out rate equal to or lower than a prescribed upper limit bit rate (See Fig. 4 TS packetizing circuit and Col. 12 lines 33-52, "a desired data rate" within "a desired transmission bandwidth" would be equal to or lower than a prescribed upper limit bit rate).

8.   Regarding claim **2**, Kaneko teaches wherein the main data is a broadcast program (See Col. 1 lines 16-19), a type of tables or a plurality of types of tables based on electronic program guide information of the broadcast program are produced as the associated data by the producing means (See Fig. 4 Version Generator 2̶2̶ ^{25} and Col. 12 lines 33-52 Col. 13 lines 12-43), the type of tables or the types of tables are transformed into the bit stream by the sending-out means (See Fig. 4 TS packetizing circuit and Col. 12 lines 33-52), and the type of tables or the types of tables transformed into the bit stream are sent out at the sending-out rate equal to or lower than the prescribed upper limit bit rate by the sending-out means (See Col. 12 lines 33-52).

9.   Regarding claim **3**, Kaneko teaches wherein a sending-out frequency of each type of tables is calculated by the producing means or the sending-out means so as to send out the types of tables at the sending-out rate equal to or lower than the prescribed upper limit bit rate and to send out each type of tables at the sending-out frequency equal to or higher than a specific sending-out frequency of the type of tables (See Col. 15 lines 20-45), and the types of tables transformed into the bit stream are sent out at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher than the specific sending-out frequencies of the types of tables by the sending-out means (See Col. 15 lines 20-45).

10.   Regarding claim **4**, Kaneko teaches wherein each type of table is produced by the producing means by adjusting an amount of information in the type of table so as to send out the types of tables at the sending-out rate equal to or lower than the prescribed upper limit bit rate and to send out each type of tables at a sending-out frequency equal to or higher than a specific sending-out frequency of the type of tables, the types of tables are transformed into the bit stream by the sending-out means, the types of tables transformed into the bit stream are sent out at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher than the specific sending-out frequencies of the types of tables by the sending-out means (See Col. 17 lines 10-27 If a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups is adjusting the amount of information in the type of table).

11.   Regarding claim **5**, Kaneko teaches wherein the sending-out frequencies of the types of tables are calculated according to a plurality of priorities of the types of tables by the producing means or the sending-out means so as to be sent out at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher than the specific sending-out frequencies of the types of tables (See Col. 17 lines 36-67, Col. 18 lines 1-65 Transmission cycle is based on priority).

12.   Regarding claim **6,** Kaneko teaches wherein the sending-out frequencies of the types of tables are calculated according to a plurality of sending-out frequency reduction rates of the types of tables by the producing means or the sending-out means so as to be sent out at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher than the specific sending-out frequencies of the types of tables (See Col. 15 lines 20-67, Col. 16 lines 1-37 A sending out frequency reduction rate is interpreted to mean the amount the frequency can be reduced from an initial value i.e. a default value minus a minimum value. Kaneko teaches where frequency has a default value and can be reduced to a minimum value. Therefore, a reduction rate is inherent).

13.   Regarding claim **7**, Kaneko teaches wherein the sending-out frequencies of the types of tables are calculated according to a plurality of sending-out frequency reduction rates of the types of tables by the producing means or the sending-out means so as to be sent out at the sending-out rate equal to or lower than the prescribed upper limit bit

rate and at the sending-out frequencies equal to or higher than the specific sending-out frequencies of the types of tables (See Col. 15 lines 20-67, Col. 16 lines 1-37).

14.   Regarding claim **8**, Kaneko teaches wherein the types of tables are produced by the producing means by adjusting the amounts of information in the types of tables according to a plurality of priorities of the types of tables so as to be sent out at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher than the specific sending-out frequencies of the types of tables (See Col. 14 lines 18-67, Col. 15 lines 1-47 The version generator determines, based on priority, whether or not to produce a new version of a table. Producing a different version of a table is adjusting the amount of information in the table. This process is directly related to the determination of transmission cycles).

15.   Regarding claim **9**, Kaneko teaches wherein the types of tables are produced by the producing means by adjusting the amounts of information in the types of tables according to a plurality of sending-out frequency reduction rates of the types of tables so as to be sent out at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher than the specific sending-out frequencies of the types of tables (See Col. 15 lines 20-67, Col. 16 lines 1-67, Col. 17 lines 1-27 If a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups is adjusting the amount of information in the type of table).

16.   Regarding claim **10**, Kaneko teaches wherein the types of tables are produced by the producing means by adjusting the amounts of information in the types of tables

according to a plurality of sending-out frequency reduction rates of the types of tables

so as to be sent out at the sending-out rate equal to or lower than the prescribed upper

limit bit rate and at the sending-out frequencies equal to or higher than the specific

sending-out frequencies of the types of tables (See Col. 15 lines 20-67, Col. 16 lines 1-

67, Col. 17 lines 1-27 If a sub-table, which is a type of table, contains too much data, it

is divided into sub-groups. Dividing into sub-groups is adjusting the amount of

information in the type of table).

17.   Regarding claim **11,** Kaneko teaches wherein any type of table which is set to a

low priority is not sent out in cases where it is impossible to send out the types of tables

at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at

the sending-out frequencies equal to or higher than the specific sending-out frequencies

of the types of tables, and the other type of tables set to a high priority or the other types

of tables set to high priorities are sent out at the sending-out rate equal to or lower than

the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher

than the specific sending-out frequencies of the types of tables (See Col. 17 lines 36-44

The output circuit reads tables out according to a priority. Tables with high priority are

read out first and tables with low priority are read out last. Although Kaneko does not

explicitly state what happens when it is impossible to send out the types of tables within

a given bit rate, it is inherent that tables with a low priority would not be sent out if it

where impossible, since the tables are sent out in order).

18.   Regarding claim **12,** Kaneko teaches wherein any type of table which is set to a

low priority is not sent out in cases where it is impossible to send out the types of tables

at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at

the sending-out frequencies equal to or higher than the specific sending-out frequencies

of the types of tables, and the other type of tables set to a high priority or the other types

of tables set to high priorities are sent out at the sending-out rate equal to or lower than

the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher

than the specific sending-out frequencies of the types of tables (See Col. 17 lines 36-44

The output circuit reads tables out according to a priority. Tables with high priority are

read out first and tables with low priority are read out last. Although Kaneko does not

explicitly state what happens when it is impossible to send out the types of tables within

a given bit rate, it is inherent that tables with a low priority would not be sent out if it

where impossible, since the tables are sent out in order).

19.   Regarding claim **13**, Kaneko teaches, wherein any type of table which is set to a

low priority is not sent out in cases where it is impossible to send out the types of tables

at the sending-out rate equal to or lower than the prescribed upper limit bit rate and at

the sending-out frequencies equal to or higher than the specific sending-out frequencies

of the types of tables, and the other type of tables set to a high priority or the other types

of tables set to high priorities are sent out at the sending-out rate equal to or lower than

the prescribed upper limit bit rate and at the sending-out frequencies equal to or higher

than the specific sending-out frequencies of the types of tables (See Col. 17 lines 36-44

The output circuit reads tables out according to a priority. Tables with high priority are

read out first and tables with low priority are read out last. Although Kaneko does not

explicitly state what happens when it is impossible to send out the types of tables within

a given bit rate, it is inherent that tables with a low priority would not be sent out if it

where impossible, since the tables are sent out in order).

20.   Regarding claim **14,** Kaneko teaches wherein the type of table or the types of

tables are again produced in cases where it is impossible to send out the type of table

or the types of tables at the sending-out rate equal to or lower than the prescribed upper

limit bit rate or it is impossible to send out each type of tables at a sending-out

frequency equal to or higher than a specific sending-out frequency of the type of tables

(See Col. 14 lines 32-46 Tables are continuously produced as information is updated,

so tables are "again produced" in all cases).

21.   Regarding claim **15,** Kaneko teaches wherein the amount of information in each

type of table is calculated prior to the production of the type of table, and each type of

table is produced by the producing means by adjusting the amount of information in the

type of table so as to send out the types of tables at the sending-out rate equal to or

lower than the prescribed upper limit bit rate and to send out each type of tables at the

sending-out frequency equal to or higher than the specific sending-out frequency of the

type of tables (See Col. 17 lines 10-27 If it is calculated that a sub-table, which is a type

of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups

is adjusting the amount of information in the type of table).

22.   Regarding claim **16,** Kaneko teaches wherein the amount of information in each

type of table is calculated prior to the production of the type of table, and each type of

table is produced by the producing means by adjusting the amount of information in the

type of table so as to send out the types of tables at the sending-out rate equal to or

lower than the prescribed upper limit bit rate and to send out each type of tables at the sending-out frequency equal to or higher than the specific sending-out frequency of the type of tables (See Col. 17 lines 10-27 If it is calculated that a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups is adjusting the amount of information in the type of table).

23.   Regarding claim **17,** Kaneko teaches wherein the amount of information in each type of table is calculated prior to the production of the type of table, and each type of table is produced by the producing means by adjusting the amount of information in the type of table so as to send out the types of tables at the sending-out rate equal to or lower than the prescribed upper limit bit rate and to send out each type of tables at the sending-out frequency equal to or higher than the specific sending-out frequency of the type of tables (See Col. 17 lines 10-27 If a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups is adjusting the amount of information in the type of table).

24.   Regarding claim **18,** Kaneko teaches wherein the amount of information in each type of table, in which the amount of the electronic program guide information is not predetermined, is detected and added to a summed value in the calculation of the amount of information performed prior to the production of the type of table, the amount of information in each type of table, in which the amount of the electronic program guide information is predetermined, is read out from a record and is added to the summed value in the calculation of the amount of information performed prior to the production of the type of table, and the amounts of information in the types of tables are calculated

(See Col. 17 lines 10-15. In both cases, (whether the amount of electronic program guide information is predetermined or not) the amount of information in each type of table is added to a summed value prior to the production of each type of table. This is equivalent to knowing a cumulative amount of information in a table when the tables are produced. The amount of information in one of Kaneko's table is a cumulative amount of information).

25.   Regarding claim **19**, Kaneko teaches wherein the amount of information in each type of table, in which the amount of the electronic program guide information is not predetermined, is detected and added to a summed value in the calculation of the amount of information performed prior to the production of the type of table, the amount of information in each type of table, in which the amount of the electronic program guide information is predetermined, is read out from a record and is added to the summed value in the calculation of the amount of information performed prior to the production of the type of table, and the amounts of information in the types of tables are calculated (See Col. 17 lines 10-15. In both cases, (whether the amount of electronic program guide information is predetermined or not) the amount of information in each type of table is added to a summed value prior to the production of each type of table. This is equivalent to knowing a cumulative amount of information in a table when the tables are produced. The amount of information in one of Kaneko's table is a cumulative amount of information).

26.   Regarding claim **20,** Kaneko teaches, wherein the amount of information in each type of table, in which the amount of the electronic program guide information is not

predetermined, is detected and added to a summed value in the calculation of the

amount of information performed prior to the production of the type of table, the amount

of information in each type of table, in which the amount of the electronic program guide

information is predetermined, is read out from a record and is added to the slammed

value in the calculation of the amount of information performed prior to the production of

the type of table, and the amounts of information in the types of tables are calculated

(See Col. 17 lines 10-15. In both cases, (whether the amount of electronic program

guide information is predetermined or not) the amount of information in each type of

table is added to a summed value prior to the production of each type of table. This is

equivalent to knowing a cumulative amount of information in a table when the tables are

produced. The amount of information in one of Kaneko's table is a cumulative amount

of information).

Conclusion

27.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jamieson W. Fish whose telephone number is 571-272-

7307. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

28.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ngoc Vu can be reached on 571-272-7320. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

29.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JF 4-13-05

NGOC-YEN VU
PRIMARY EXAMINER